Analysis report ENZ16254

Spectral Service



Laboratorium für Auftragsanalytik GmbH

+49/(0)2236/96947-0

+49/(0)2236/96947-11

Info@spectralservice.de

//www.spectralservice.de

Spectral Service GmbH Post box 560122 0-50986 Köln

Enzymotec Ltd. Mr. Gai Ben-Dror Hataasia 5 st.

Migdal HaEmeq 23106

Stabilized PS dispersion capsules (capsules: 767,14 mg, 759,43 mg, 765,05 mg, 760,19 mg)

Analysis method: quantitative 31P-NMR spectroscopy according to SAA043

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Instrument: Bruker Avance 300 MHz with autom, sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,9 MW [g/mol]:

326,29

Initial weight test item [mg]: 3051,81

Initial weight Internal standard [mg]:

65,36

Sample Ident.: PS20D NF #26/5K 096628, Ch.-B.: #0505

Lab. No:

Phone:

Fax:

eMail:

1123

Spectral Service Code: ENZ16254

Results from: 26.08.2005

ectral Service (Code: ENZ16254	11004110							
	Weight-%	VIol-%	MW [g/mol]						
Phospholipid	*)	*)	770,0						
PC		*)	515,0						
1-LPC	*)	*)	515,0						
2-LPC	*)		835,0						
PI	0,27	1,60							
LPI	*)	*)	570,0						
PS	14,05	87,77	797,2						
LPS	0,19	1,84	517,0						
		*)	770,0						
SPH	*)	2,86	725,0 470,0						
PE	0,42	2,00							
LPE	*)	i de la companya del companya de la companya del companya de la co	990,0						
APE	0,57	2,84	758,0						
PG	*)	*)							
DPG	0,29	2,15	682,5						
PA	*)	*)	685,0						
LPA	*	*)	430,0						
	0,15	0,94	770,0						
Other	The second secon	00,00							
Sum	15,93	00,00							
Phosphorus	0,62		erved, no signal assignment or						

*) = not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

Cologne, 26. August 2005

Thorsten Buchen (Food chemist)

Spectral Service GmbH Emil-Hoffmann-Str. 33 D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

Analysis report ENZ16672-1

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd. Mr. Gai Ben-Dror Hataasia 5 st.

Migdal HaEmeg 23106

Israel

Ambient Con.

Phone:

+49/(0)2236/96947-0

Fax: eMail:

+49/(0)2236/96947-11 Info@spectralservice.de

http://www.spectralservice.de

(capsules: 788,32 mg, 764,59 mg, 765,33 mg, 773,35 mg)

Stabilized PS dispersion capsules 25 months
Analysis method: quantitative 31P-NMR spectroscopy according to SAA043

Instrument: Bruker Avance 300 MHz with autom, sample changer and BBI probe head

326,29

Internal standard: Triphenyl phosphate

Initial weight test item [mg]: 3091,59

Content [%]: 99,7 MW [g/mol]:

Initial weight Internal standard [mg]:

61,43

Sample Ident.: NF 096628 - RT/3 months

Lab. No:

Spectral Service Code: ENZ16672-1

Results from: 08.11.2005

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	*)	*)	770,0
1-LPC	*)	*)	515,0
2-LPC	*)	*)	515,0
PI	0,24	1,41	835,0
LPI	*)	*)	570,0
PS	13,52	82,08	797,2
LPS	0,07	0,65	517,0
SPH	*)	*)	770,0
PE	0,16	1,05	725,0
LPE	*)	*)	470,0
APE	0,29	1,44	990,0
PG	*)	*)	758,0
DPG	0,17	1,18	682,5
PA]	1,57	11,10	685,0
LPA	0,02	0,26	430,0
Other	0,13	0,83	770,0
Sum	16,18	100,00	
Phosphorus	0,64		

*) = not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

Cologne, 8. November 2005

Thorsten Buchen (Food chemist)

Spectral Service GmbH Emil-Hoffmann-Str. 33 D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels

Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

ENZ 16672-1

Spectral Service

Analysis report ENZ18342-2

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd.

Mrs. Neta Scheinman

Hataasia 5 st.

Migdal HaEmeq 23106

Israel

Ambient Con.

Phone:

+49/(0)2236/96947-0

Fax:

+49/(0)2236/96947-11

eMail:

Info@spectralservice.de

http:

//www.spectralservice.de

Stabilized 15 dispersion consules

[2 whole capsules]

Analysis method: quantitative 31P-NMR spectroscopy according to SAA043

Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head

12 months

Internal standard: Triphenyl phosphate

Content [%]: 99,7 MW [g/mol]:

326,29

Initial weight test item [mg]: 1556,17

Spectral Service Code: ENZ18342-2

Initial weight Internal standard [mg]:

20,35

Sample Ident.: Sample 29 - RT - 20/08/06

Lab. No:

Results from: 23.08.2006

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	*)	*)	770,0
1-LPC	*)	*)	515,0
2-LPC	*)	*)	515,0
PI	0,23	1,27	835,0
LPI	*)	*)	570,0
. PS**	13,61	79,69	797,2
LPS	0,16	1,47	517,0
SPH	*)	*)	770,0
· PE	*)	*)	725,0
LPE	*)	*)	470,0
APE	0,33	1,54	990,0
PĢ	*)	*)	758,0
DPG	0,28	1,93	682,5
PA	1,57	10,68	685,0
LPA	0,06 ·	0,62	430,0
Other	0,46	2,80	770,0
Sum	16,70	100,00	
Phosphorus	0,66	-	

^{*) =} not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

** calculated for the Na-salt

Cologne, 23. August 2006

Thorsten Buchen (Food chemist)

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Spectral Service GmbH Emil-Hoffmann-Str. 33

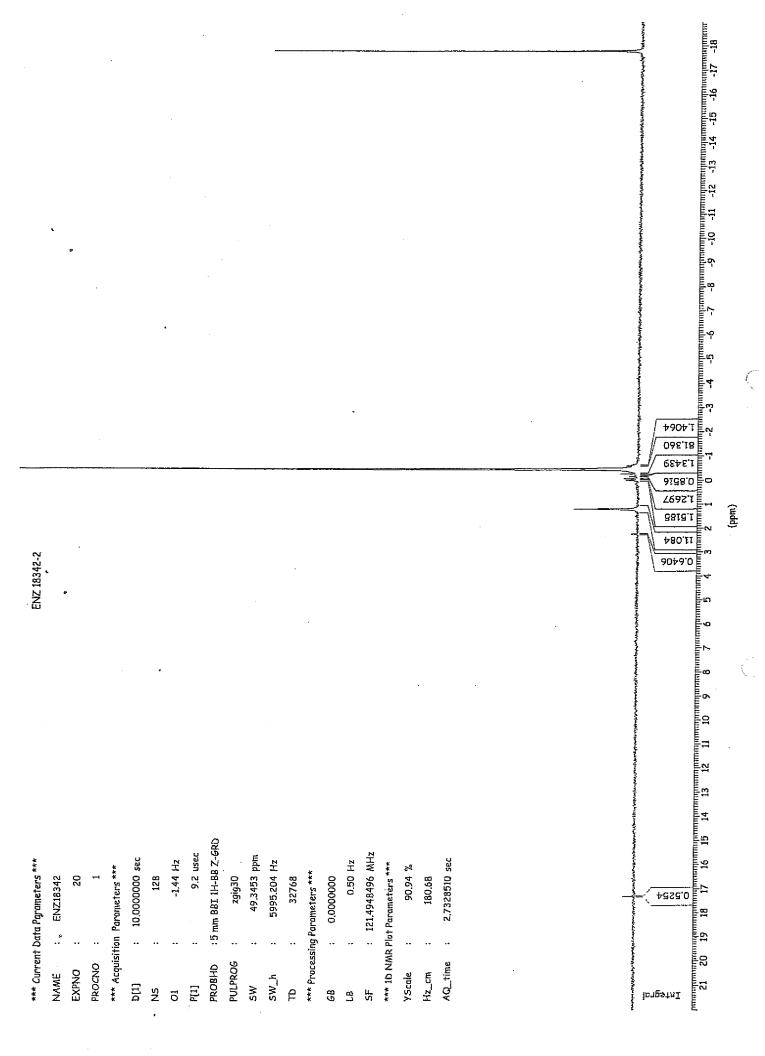
D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels

Gesellschaftssitz: Köln HRB 20416 Gerichtestand Köln

ENZ 18342-2

Speculai Service din



Analysis report ENZ19292-2

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd.

Mrs. Neta Scheinman

Hataasia 5 st.

Migdal HaEmeq 23106

Israel

Ambient Con

+49/(0)2236/96947-0

Fax:

Phone:

+49/(0)2236/96947-11 eMail: Info@spectralservice.de

http://www.spectralservice.de

stabilized PS dispersion capsules

[2 whole capsules]

Analysis method: quantitative ³¹P-NMR spectroscopy according to SAA043

1+ months

Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,7

MW [g/mol]:

326,29

Initial weight test item [mg]: 1565,65

Initial weight Internal standard [mg]:

20,43

Sample Ident.: Sample 29 (RT)

Lab. No:

Results from: 29.01.2007

Spectral Service	Code: ENZ19292-2	<u></u>	Results from: 29.01.2007				
Phospholipid	Weight-%	Mol-%	MW [g/mol]				
PC	*)	*)	770,0				
1-LPC	*)	*)	515,0				
2-LPC	*)	*)	515,0				
PI	*)	*)	835,0				
LPI	*)	*)	570,0				
PS**	13,63	81,57	797,2				
LPS	0,13	1,22	517,0				
SPH	*)	*)	770,0				
PE	*)	*)	725,0				
LPE	*)	*)	470,0				
APE	0,30	1,43	990,0				
PG	*)	*)	758,0				
DPG	0,25	1,72	682,5				
PA	1,47	10,26	685,0				
LPA	0,06	0,62	430,0				
Other	0,51	3,18	770,0				
Sum	16,35	100,00					
Phosphorus	0,65		erved, no signal assignment or < 0,01%				

 *) = not observed, no signal assignment Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

** calculated for the Na-salt

Cologne, 29. January 2007

Thorsten Buchen (Food chemist)

Spectral Service GmbH Emil-Hoffmann-Str. 33 D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

mdd

ENZ 19292-2

Analysis report ENZ20680-2

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd.

Mrs. Neta Scheinman

Hataasia 5 st.

Migdal HaEmeq 23106

Israel

einman
Ambieint Con
Phone: +49/(0)2236
Fax: +49/(0)2236
eMail: Info@spectr
http: //www.spect

+49/(0)2236/96947-0

Fax: +49/(0)2236/96947-11 eMail: Info@spectralservice.de

http://www.spectralservice.de

24 months

[2 whole capsules]

Analysis method: quantitative ³¹P-NMR spectroscopy according to SAA043

Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,7 MW [g/mol]:

326,29

Initial weight test item [mg]: 1537,82

Initial weight Internal standard [mg]:

10,12

Sample Ident.: 76-29 - 350 RT MILL

Lab. No:

Spectral Service Code: ENZ20680-2

Results from: 06.09.2007

Dhaanhalinid	Moight 9/	Mol-%	MW [g/mol]
Phospholipid	Weight-%	*)	770,0
PC	*)		
1-LPC	*)	*)	515,0
2-LPC	*)	*)	515,0
PI	0,25	1,42	835,0
LPI	*)	*)	570,0
PS**	13,96	83,74	797,2
LPS	0,08	0,71	517,0
SPH	*)	*)	770,0
PE	*)	*)	725,0
LPE	*)	*)	470,0
APE	0,27	1,33	990,0
PG	*)	*)	758,0
DPG	0,21	1,46	682,5
PA	1,24	8,65	685,0
LPA	0,09	1,02	430,0
Other	0,27	1,67	770,0
Sum	16,37	100,00	
Phosphorus	0,65		

= not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

** calculated for the Na-salt

Cologne, 6. September 2007

Thorsten Buchen (Food chemist)

TH BL

Spectral Service GmbH EmilHoffmann-Str. 33

D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl

Dr. Werner Ockels

Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

ENZ20680-2 76-29 35deg																							1,3009 1,377 1,3009 1,3009 1,378 1,3009 1,30	որտանրամարտությունումիումից 5 4 3 2 1 0 –1 (ppm)
*** Current Data Parameters ***	NAME : enz20680	EXPNO : 20	PROCNO : 1	*** Acquisition Parameters ***	D[1] : 10,0000000 sec	NS : 128	O1 : 1.44 Hz	P[1] : 9.2 usec	PROBHD :5 mm 881 1H-88 Z-GRD	PULPROG : zģig30	SW : 49,8453 ppm	SW_h : 5995,204 Hz	TD : 65536	*** Processing Parameters ***	6B : 0.0000000	LB : 0.50 Hz	SF : 121.4948479 MHz	*** 1D NMR Plot Parameters ***	YScale : 102.14 %	Hz_cm : 180.68	AQ_time : 5.4657020 sec		Annex contractive properties of the	րոստղումնությունության արարանականություն ան 12 11 10 9 8 7 6

Analysis report ENZ16672-2

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd.

Mr. Gai Ben-Dror

Hataasia 5 st.

Migdal HaEmeg 23106

Israel

Ben-Dror
ia 5 st.
HaEmeq 23106

Stabilized PS dispersion capsules

(capsules: 761,89 mg, 780,48 mg, 776,05 mg, 776,46 mg)

Accelerated Con.

+49/(0)2236/96947-0

+49/(0)2236/96947-11

Info@spectralservice.de http://www.spectralservice.de

Analysis method: quantitative 31P-NMR spectroscopy according to SAA043

25 months Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,7

MW [g/mol]:

326,29

Initial weight test item [mg]: 3094,88

Initial weight Internal standard [mg]:

59,26

Sample Ident.: NF 096628 - 35 3 months

Lab. No:

Spectral Service Code: ENZ16672-2

Results from: 08.11.2005

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	*)	*)	770,0
1-LPC	*)	*)	515,0
2-LPC	*)	*)	515,0
- PI	0,22	1,25	835,0
LPI	*)	*)	570,0
PS	13,46	81,95	797,2
LPS	0,09	0,82	517,0
SPH	*)	*)	770,0
PE	0,27	1,80	725,0
LPE	*)	*)	470,0
APE	0,30	1,48	990,0
PG	*)	******************************	758,0
DPG	0,18	1,29	682,5
PA PA	1,46	10,38	685,0
LPA	0,04	0,48	430,0
Other	0,09	0,54	770.0
Sum	16,10	100,00	770,0
Phosphorus	0,64	1.00,00	

*) = not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

Cologne, 8. November 2005

Thorsten Buchen (Food chemist)

Spectral Service GmbH Emil-Hoffmann-Str. 33 D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels

Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

ENZ 16672-2

Analysis report ENZ18342-3

Spectral Service



Laboratorium für Auftragsanalytik GmbH

Spectral Service GmbH Post box 560122 D-50986 Köln

Enzymotec Ltd.

Mrs. Neta Scheinman

Hataasia 5 st.

Migdal HaEmeq 23106

Israel

Phone:

+49/(0)2236/96947-0

Fax:

+49/(0)2236/96947-11

eMail: Info@spectralservice.de http://www.spectralservice.de

aasia 5 st.
dal HaEmeq 23106
el
Stabilized PS dispersion capsules

[2 whole capsules]

Analysis method: quantitative 31P-NMR spectroscopy according to SAA043

Instrument: Bruker Avance 300 MHz with autom, sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,7

MW [g/mol]:

326,29

Initial weight test item [mg]: 1566,47

Initial weight Internal standard [mg]:

20.22

Sample Ident.: Sample 29 – 35°C - 20/08/06

Spectral Service Code: ENZ18342-3

Lab. No:

Results from: 23,08,2006

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	*)	*)	770,0
1-LPC	*)	*)	515,0
2-LPC	*)	*)	515,0
PI	0,25	1,57	835,0
LPI	*)	*)	570,0
PS**	13,28	86,13	797,2
LPS	0,14	1,37	517,0
SPH	*)	*)	770,0
PE	*)	*)	725,0
· LPE	*)	*)	470,0
APE	0,29	1,53	990,0
PG	*)	*)	758,0
DPG	0,23	1,76	682,5
PA	. 0,61	4,59	685,0
LPA	0,09	1,07	430,0
Other	0,30	1,99	770,0
Sum	15,19	100,00	
Phosphorus	0,60		

= not observed, no signal assignment or < 0,01% Limit of detection (S/N 10:1 Peak/Peak) = 0,5% ** calculated for the Na-salt

Cologne, 23. August 2006

Thorsten Buchen (Food chemist)

Spectral Service GmbH Emil-Hoffmann-Str. 33 D-50996 Köln

Geschäftsführer: Dr. Bernd Diehl Dr. Werner Ockels Gesellschaftssitz: Köln HRB 20416 Gerichtsstand Köln

Spectral Service and

08,71--

را 두 40 81.1 -71.0 71.0 50.0-21.0-25.0-24.0-34.0-68.0 S

ENZ 18342-3

-19 ppm

-47

⊅6°91

*** Current Data Parameters ***

enz18342	30	***	Parameters ***	10.0000000 sec	128	-1.44 Hz	9.2 usec	:5 mm 981 1H-88 Z-GRD	zgig30	49.3453 ppm	5995.204 Hz	32768	*** Processing Parameters ***	0.000000	0.50 Hz	121.4948485 MHz	*** 1D NMR Plot Parameters ***	99.31 %	180.68	2.7328510 sec	
6					••		••	ξ.					ing Pa			: 15	Plot P				
NAME	EXPNO	PROCNO	*** Acquisition	b[1]	NS	10	P[1]	PROBHD	PULPROG	SW	SW_h	£	*** Process	68	87	SF	*** 1D NMR	YScale	Hz_cm	AQ_time	

(mqq)

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